

REMARKS

INTRODUCTION:

In accordance with the foregoing, claims 1, 8, and 26 have been amended. No new matter is being presented, and approval and entry are respectfully requested.

Claims 1-35 are pending and under consideration, and claims 29-35 remain withdrawn. Reconsideration is respectfully requested.

ALLOWABLE SUBJECT MATTER:

In the Office Action, at page 2, item 3, the Examiner indicated that claims 5, 6, and 9-25 would be allowable if rewritten in independent form. Applicant holds rewriting of these claims in abeyance until the Examiner has had the opportunity to review the arguments presented herein.

REJECTION UNDER 35 U.S.C. §103:

In the Office Action, at page 2, item 2, the Examiner rejected claims 1-4, 7, 8, and 26-28 under 35 U.S.C. §103(a) as being unpatentable over Motoyama et al. (U.S. Patent No. 4,499,738 – hereinafter Motoyama) in view of Jaster (U.S. Patent No. 5,103,650 hereinafter – Jaster). Applicant traverses this rejection and respectfully requests reconsideration.

Amended, independent claim 1 recites: "...a second refrigerant circuit containing the refrigerant passing through the condenser and flowing into the suction side of the compressor through the third expanding unit and the second evaporator, bypassing the first expanding unit, the first evaporator, and the second expanding unit...."

Amended, independent claim 8 recites: "...a second refrigerant circuit containing the refrigerant passing through the condenser flowing into the suction side of the compressor through a third expanding unit and the second evaporator, bypassing the first expanding unit, the first evaporator, and the second expanding unit...."

And amended, independent claim 26 recites: "...a second refrigerant circuit containing the refrigerant passing through the condenser flowing into the suction side of the compressor through the third expanding unit and the second evaporator, bypassing the first expanding unit, the first evaporator, and the second expanding unit...."

Motoyama discloses a first coolant passage in which refrigerant flows through a first capillary tube 16, a second capillary tube 17, an evaporator for a storage compartment 10, and an evaporator for a freezing compartment 7. Additionally, there is an electromagnetic valve 21 that creates a second coolant passage that bypasses the coolant passage for the storage compartment evaporator 10, to cool only the freezing compartment evaporator 7. For the second coolant passage, coolant flows from the first capillary tube 16, through the electromagnetic valve 21, a third capillary tube 53, and then to the evaporator for the freezing compartment 7. (See Motoyama, at FIG. 4, col. 1, lines 60-64, col. 3, lines 6-16, and col. 7, line 67 to col. 8, line 8). Thus, coolant necessarily flows through the first expanding unit 16, and then either through the second capillary tube 17, the evaporator for the storage compartment 10, and the evaporator for the freezing compartment 7, or through the third capillary tube 53, and then to the evaporator for the freezing compartment 7.

Motoyama neither discloses nor suggests "...a second refrigerant circuit containing the refrigerant passing through the condenser flowing into the suction side of the compressor through the third expanding unit and the second evaporator, bypassing the first expanding unit, the first evaporator, and the second expanding unit...."

Applicant respectfully submits that Jaster fails to cure this defect.

An object of Jaster is to extend a thermodynamic advantage of a dual evaporator two stage system to a refrigeration system having three or more evaporators, to have at least a third food compartment maintained at a temperature intermediate to temperatures of typical freezer and fresh food compartments of a household refrigerator. (See Jaster, at col. 2, lines 13-21). Referring to FIG. 2, Jaster recites:

"...a preferred embodiment of a three evaporator, three stage system is shown. The system comprises a first expansion throttle 11, a first evaporator 12 for providing cooling to a freezer compartment, first, second and third compressors 13, 14 and 15, respectively, a condenser 16, a second expansion throttle 17, a second evaporator 18 for providing cooling to a fresh food compartment, a third expansion throttle 19, and a third evaporator 20 for providing cooling to an intermediate temperature compartment. All the above elements are connected in series, in that order, in a refrigerant flow relationship by a conduit 21." (Jaster col. 3, lines 8-19).

In Jaster, each expansion throttle – evaporator pair is dedicated to cooling one of the freezer compartment, the fresh food compartment, or the intermediate temperature compartment.

Thus, neither Motoyama nor Jaster, either alone or in combination disclose or suggest "...a second refrigerant circuit containing the refrigerant passing through the condenser flowing into the suction side of the compressor through the third expanding unit and the second evaporator, bypassing the first expanding unit, the first evaporator, and the second expanding unit...."

Furthermore, Applicant respectfully submits that a prima facie case of obviousness has not been properly established. To establish a prima facie case of obviousness there must be a suggestion or motivation to combine reference teachings and the combined references must teach or suggest all the claims limitations. MPEP §2142.

A prima facie obviousness rejection requires evidenced motivation from some reference in the record that would lead one skilled in the art to combine the relevant teachings of the references. See In re Fritch, 23 USPQ 2d 1780, 1783 (Fed. Cir. 1992).

The Examiner asserts that it would have been obvious to modify Motoyama "so that the first evaporator 10 follows the first expanding unit 16, in view of Jaster, for the purpose of generating more cooling from the first evaporator."

But in Motoyama, regardless of which coolant passage, an evaporator 10 or 7 is already immediately preceded by a capillary tube 17 or 53. Thus, what the Examiner appears to assert as motivation to combine Motoyama and Jaster is already found in Motoyama alone. Thus there would be no motivation to combine Motoyama and Jaster.

As stated in the MPEP, "[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination." See MPEP 2143.01. There is simply no suggestion or motivation in Motoyama or Jaster to construct such a combination.

Applicant respectfully submits that independent claims 1, 8, and 26 patentably distinguish over the cited art, and should be allowable for at least the above-mentioned reasons. Further, Applicant respectfully submits that claims 2-4, and 7, which depend from independent claim 1,

and claims 27 and 28, which depend from independent claim 26 should be allowable for at least the same reasons as claims 1 and 26, as well as for the additional features recited therein.

CONCLUSION:

In accordance with the foregoing, Applicant respectfully submits that all outstanding objections and rejections have been overcome and/or rendered moot, and further, that all pending claims patentably distinguish over the cited art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance which action is earnestly solicited. At a minimum, this Amendment should be entered at least for purposes of Appeal as it either clarifies and/or narrows the issues for consideration by the Board.


If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited and possibly concluded by the Examiner contacting the undersigned attorney for a telephone interview to discuss any such remaining issues.

If there are any underpayments or overpayments of fees associated with the filing of this Amendment, please charge and/or credit the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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